

In the Claims

1. (Currently Amended) An internal combustion engine, comprising:

a crankcase having walls which define an interior volume for containing oil and which define a cylinder;

a piston moveably positioned within the cylinder of the crankcase;

a cylinder head having a proximal end fastened to the crankcase, the cylinder head extending laterally outward from the crankcase and terminating at a distal end;

a rocker arm cover, fastened to the distal end of the cylinder head, the rocker arm cover defining a cavity therein which forms a valve box;

a drainback passage interconnecting the interior volume of the crankcase and the valve box to enable the flow of fluid from the valve box to the interior volume of the crankcase; and

a check valve, disposed within the drainback passage, for allowing the flow of fluid from the valve box to the interior volume of the crankcase and preventing the flow of fluid from the interior volume of the crankcase to the valve box, wherein the check valve includes a check ball seating against a bore defining at least a portion of the drainback passage at the proximal end of the cylinder head to prevent the flow of fluid from the interior volume of the crankcase to the valve box when there is high pressure present within the crankcase or when the engine is operated at an elevated angle.

2. (Currently Amended) An internal combustion engine, as recited in claim 10, wherein the check valve comprises a reed valve.

3. (Currently Amended) An internal combustion engine, as recited in claim 10, wherein the check valve comprises a check disk.

4. (Currently Amended) An internal combustion engine, as recited in claim 10, wherein the check valve comprises a ball valve.

5. (Currently Amended) An internal combustion engine, as recited in claim 10, wherein the drainback passage is formed as an integral part of the cylinder head and the crankcase.

6. (Currently Amended) An internal combustion engine, as recited in claim 1, wherein:

the cylinder head has a first bore formed therethrough extending from the distal end to the proximal end of the cylinder head;

the cylinder has a cylinder wall, integrally formed in the one wall of the crankcase, and having an interior surface that communicates with the interior volume of the crankcase and an exterior surface that engages the proximal end of the cylinder head; and

the cylinder wall has a second bore formed therethrough extending from the interior surface to the exterior surface, where it aligns with and couples to the cylinder head bore; wherein the first bore and the second bore together define the drainback passage, and said check ball is disposed in a cavity formed at one end of said second bore and seats against said second bore to prevent the flow of fluid from the interior volume of the crankcase to the valve box when there is high pressure present within the crankcase or when the engine is operated at an elevated angle.

7. (Currently Amended) An internal combustion engine, as recited in claim 6, further comprising a head gasket disposed between the crankcase and the cylinder head, the head gasket having an aperture that is aligned with the first and second bores to allow the flow of fluid therethrough.

8. (Cancelled).

9. (Previously Presented) An internal combustion engine, as recited in claim 10, wherein the check ball is formed of a fluorocarbon material.

10. (Currently Amended) An internal combustion engine, comprising:
a crankcase having walls which define an interior volume for containing oil and which
define a cylinder;
a piston moveably positioned within the cylinder of the crankcase;
a cylinder head having a proximal end fastened to the crankcase, the cylinder head
extending laterally outward from the crankcase and terminating at a distal end;
a rocker arm cover, fastened to the distal end of the cylinder head, the rocker arm cover
defining a cavity therein which forms a valve box;
a drainback passage interconnecting the interior volume of the crankcase and the valve box
to enable the flow of fluid from the valve box to the interior volume of the crankcase; and
a check valve, disposed within the drainback passage, for allowing the flow of fluid from
the valve box to the interior volume of the crankcase and preventing the flow of fluid from the
interior volume of the crankcase to the valve box,
An internal combustion engine, as recited in claim 1, wherein the cylinder head has a first
bore formed therethrough extending from the distal end to the proximal end of the cylinder head;
the cylinder has a cylinder wall, integrally formed in the one wall of the crankcase; and
having an interior surface that communicates with the interior volume of the crankcase and an
exterior surface that engages the proximal end of the cylinder head; and
the cylinder wall has a second bore formed therethrough extending from the interior
surface to the exterior surface, where it aligns with and couples to the cylinder head bore; wherein

the first bore and the second bore together define the drainback passage.

~~The internal combustion engine, as recited in claim 6,~~ wherein the check valve comprises:

a cavity in the exterior surface of the cylinder wall at one end of the second bore; and

a check ball is disposed within the cavity;

wherein the check ball seats against the second bore at the proximal end of the cylinder head to prevent the flow of fluid from the interior volume of the crankcase to the valve box when there is high pressure present within the crankcase or when the engine is operated at an elevated angle.

11. (Currently Amended) The internal combustion engine, as recited in claim 10, wherein the check valve is configured so that when the crankcase is tipped beyond a predetermined angle, the check valve substantially prevents the flow of fluid from the interior volume of the crankcase to the valve box regardless of a position of the piston.

12. (Currently Amended) The internal combustion engine, as recited in claim 10, wherein the check valve allows and prevents the flow of fluid in the drainback passage in response to pressure in the crankcase.

13. (New) An internal combustion engine, as recited in claim 1, wherein the drainback passage is formed as an integral part of the cylinder head and the crankcase.

14. (New) An internal combustion engine, as recited in claim 1, wherein the check ball is formed of a fluorocarbon material.

15. (New) The internal combustion engine, as recited in claim 1, wherein the check valve is configured so that when the crankcase is tipped beyond a predetermined angle, the check valve substantially prevents the flow of fluid from the interior volume of the crankcase to the valve box regardless of a position of the piston.

16. (New) The internal combustion engine, as recited in claim 1, wherein the check valve allows and prevents the flow of fluid in the drainback passage in response to pressure in the crankcase.